

HEARTLAND CONSUMERS POWER DISTRICT  
INTEGRATED SYSTEM TARIFF - EAST SIDE  
December 31, 1996

30-Jul-97

Line	Description	Cost of Service Amount	
1.	Transmission Plant Investment **	\$1,648,524.80	Page 5, Line L63,L65,L66
2.	Less Accumulated Depreciation & IDC **	(\$272,841.14)	Page 5, Lines M63,65,66,N63,65,66
3.	General Plant - Trans Share	\$58,702.32	Page 5, Line L77
4.	Less Accum Depr & IDC-GP-Trans	(\$19,115.74)	Page 5, Lines M77,N77
5.	Materials & Supplies - Trans	50.00	Page 3
6.	Cash Working Capital	\$2,491.49	1112 of Line 16 + 17 (this page)
7.	<b>Transmission investment Rate Ease</b>	<b>\$1,417,761.72</b>	
8.			
9.	Rate of Return * 6.64%	\$94,081.68	Line 7 x line 9 rate (this page)
10.	Transmission Depr Expense **	\$17,429.36	Page 5, Line P63,P65,P66
11.	GP Depr Expense - Trans Share	\$2,290.38	Page 5, Line P77
12.	GP Maintenance	\$1,379.48	Page 2, Line c47
13.	income Tax	\$69.00	Page 2, Line c53
14.	Taxes Other than Income	\$32,473.08	Page 2, Lines C57,C59,C62,C63
15.	A & G Expenses	565,453.38	Page 2, Line C69
16.	Transmission O & M	\$29,897.83	Page 2, Line C75,C76
17.	Less:Trans of Elect by Others	\$0.00	Page 3
18.	<b>Subtotal Transmission Revenue Requirement</b>	<b>\$243,074.20</b>	
19.			
20.	Annual Trans Third Party Payment	50.00	
21.	Annual Trans Third Party Revenue	50.00	
22.			
23.	<b>Total Transmission Revenue Requirement</b>	<b>\$243,074.20</b>	

\* Weighted Cost of Capital

\*\* Doesn't Include HCPD's TP-II Investment

A	A	B	C	D	E	F	G	H	I
1	HCPD TRANSMISSION & GENERAL PLANT (EAST SIDE & WEST SIDE)					k:\data\cpwdata\transm96			
2	December 31, 1996					30-Jul-97			
3	Page 1 of 7								
4		HCPD Invest	East Side	Depr	IDC	West Side	Depr	IDC	
5	LRS	\$48,873,701.98	\$1,837,719.60	17.88%	17.85%	\$3,931,003.61	100.00%	100.00%	
6	TP-I	\$871,635.18	\$871,635.18	8.48%	6.46%		0.00%	0.00%	
7	TP-II	\$6,752,305.09	\$6,752,305.09	55.69%	66.57%		0.00%	0.00%	
8	TP-II Marshall	\$402,535.87	\$402,535.87	3.92%	3.91%		0.00%	0.00%	
9	TP-III Groton	\$374,353.75	\$374,353.75	3-64%	3.64%		0.00%	0.00%	
10									
11		\$57,274,531.87	\$10,238,549.49			\$3,931,003.61			
12			6.90%			7.65%			
13	General Plant Improvement	\$592,725.31	\$40,900.52	0.40%	0.40%	\$0.00	0.00%	0.00%	
14	Furniture & Equipment	\$108,958.76	\$7,518.61		0.07%	\$0.00		0.00%	
15	Furniture & Equipment-EPD	5124,103.40	\$8,563.65		0.06%	50.00		0.00%	
16	Transportation Equipment	\$7,521.81	\$519.04		0.01%	50.09		0.00%	
17	Headquarter's Improvement	\$17,397.50	\$1,200.50		0.01%	\$0.00		0.00%	
18									
19		\$58,125,238.65	\$10,297,251.81	100.00%	100.00%	\$3,931,003.61	100.00%	100.00%	
20									
21		Depreciation	East Sids			West Side			
22	Accum Depr-Plant	\$10,652,783.61	\$735,086.51			\$815,139.96			
23	Accum Depr-Gen'l Plant	\$147,152.23	\$10,154.12			50.00			
24	Accum Depr-Trans Equip	\$7,521.81	\$519.04			\$0.00			
25									
26		\$10,807,457.65	\$745,759.66			\$815,139.96			
27									
28		Int During Const	East Side			West Side			
29	1977 IDC	\$29,680,964.00							
30	1979 IDC	\$28,763,565.00							
31	Times 24%	\$14,026,687.00	\$967,899.92			\$1,073,307.55			
32									
33		Annual Depr	East Side			West Side			
34	Depr Exp-Plant	\$1,575,000.00	\$108,681.57			5120,517.37			
35	Depr Exp-Gen'l Plant	\$25,521.31	\$1,761.08			\$0.00			
36	Depr Exp-Trans Equip	\$1,403.94	\$96.88			\$0.00			
37									
38		\$1,601,925.25	\$110,539.52			\$120,517.37			
39									
40									
41									
42									

Appendix E- Integrated System Transmission Cost Support Heartland

A	A	B	C	D	E	F	G	H	I
43	HCPD TRANSMISSION & GENERAL PLANT (EAST SIDE & WEST SIDE)								
44	December 31, 1996								
45	Page 2 of 7								
46		GP Maint	East Side			West Side			
47	HCPD	\$19,991.20	\$1,379.48			\$0.00			
48	LRS	\$27.00	\$20.25			\$6.75			
49									
50		\$20,018.20	\$1.39973			\$6.75			
51									
52		Income Tax	East Side			West Side			
53		\$1,000.00	\$69.00			\$0.00			
54									
55		Tax Other Than	East Side			West Side			
56		Income							
57	HCPD Payroll	\$25,970.91	\$1.79210			\$0.00			
58	LRS Payroll	\$1,141.00	\$855.75			\$266.25			
59	Headquarter's	\$23,120.92	\$1,595.44			\$0.00			
60	LRS (HCPD)	\$345,918.70	\$23,869.83			\$26,469.34			
61	LRS (LRS-Trans)	\$1,372.00	\$1.02900			\$343.00			
62	TP-I	\$19,830.18	\$19,830.18			\$0.00			
63	TP-III	\$9,255.36	\$9,255.36			\$0.00			
64	TP-II	\$64,133.82	\$0.00			\$0.00			
65									
66		\$490,742.89	\$58,227.66			\$27,097.59			
67									
68		A&G Expenses	East Side			West Side			
69	HCPD	\$948,542.36	\$65,453.38			\$0.00			
70	LRS-Trans	\$151,360.00	\$113.52000			\$37,840.00			
71									
72		\$1,099,902.36	\$178,973.38			\$37,840.00			
73									
74		Transm O&M	East Side			West Side			
75	TP-I	\$26,599.26	\$26,599.26			\$0.00			
76	TP-III Groton	\$3,298.57	\$3,298.57			\$0.00			
77	LRS-Trans	\$56,573.00	\$42.42976			\$14,143.25			
78									
79		\$86,470.83	\$72,327.58			\$14,143.25			
80									
81	... Not Included in Transm O&M and Trsm by Others:								
82	MAPP	\$26,841.82	\$26,841.82						
83	DOE/WAPA	\$1,301,848.35	\$976,386.26			\$325,462.09			

# Appendix E - Integrated System Transmission Cost Support - Heartland

A	J	K	L	M	N	O
1		HCPD TRANSMISSION & GENERAL PLANT (EAST SIDE)		30-Jul-97		
2		Dacember31.1996				
3		Page 4 of 7				
4						
5		CPX	Description	Investment	Accum Depr	Accum IDC
6						Net Book
7		LINES				
8		049 245 kV Line from LRS to NB Border (50%)		\$170,416.26		
9		050 345 kV Line NB Border to Stegall Sub (50%)		\$14,968.31		
10		051 345 Line From LRS to NB Border		\$137,815.17		
11		052 345 kV Line From NB Border to Sidney Sub		\$213,292.60		
12	1	053 345 kV Line from Stegall Sub to Sidney Sub		\$286,411.91		
13		074 345 kV Line From LRS to CO Border (.10457)		\$112,442.49		
14		077 LRS Plant Site Lines (.42786)		\$31,082.68		
15	1	091 Nebraska Tax		\$11,492.90		
16		101 230 kV Line From Sidney Sub to WAPA Sub		\$28,871.31		
17		103 230 kV Line Stegall Sub to Stegall/WAPA		\$18,007.22		
18						
19		Subtotal Lines		\$1,024,800.85		
20						
21		SUBSTATIONS				
22	2	048 345 kV LRS Substation (.42786)		\$149,514.69		
23		078 345,230 kV Stegall Substation		\$176,138.03		
24		079 345/230 kV Sidney Substation		\$241,094.55		
25		084 230 kV Stegall-WAPA Addition		\$35,271.55		
26		100 230/115 kV Sidney Substation Addition		\$20,116.20		
27		116 LRS #1 Main Transformer (.87766)		\$95,876.46		
28	2					
29		Subtotal Substations		\$718,011.48		
30						
31		MICROWAVE COMMUNICATIONS				
32		131 Microwave-Wyoming (50%)		\$15,865.51		
33		133 Microwave-Nebraska		\$29,454.93		
34	3	135 Microwave-North Dakota		\$2,635.65		
35		138 Microwave-South Dakota		\$1,543.75		
36	3					
37				\$49,699.84		
38		Less Microwave Non-Transmission (70%)		\$34,789.89		
39						
40		Subtotal Microwave Communications		\$14,909.95		
41						
42						

## Appendix E - Integrated System Transmission Cost Support - Heartland

A	A	B	C	D	E	F	G	H	I
84									
85	HCPD TRANSMISSION & GENERAL PLANT (EAST SIDE & WEST SIDE)								
8 6	December 31, 1996								
8 7	Page 3 of 7								
88									
89		Trsm by Others	East Side			West Side			
90	LRS-Trans	(\$49,200.00)	(\$36,900.00)			(\$12,300.00)			
91									
92		(\$49,200.00)	(\$36,900.00)			(\$12,300.00)			
93									
94		Material & Supplies	East Side			West Side			
95	REA Acct 163 Balance Sheet Items	\$35,182.60	\$26,386.95			\$8,795.65			
96									
97	Rate of Return								
98	1996 Liability	\$68,415,006.00	96.72%	6.42%		6.21%			
99	1996 Equity	\$2,321,292.00	3.26%	13.00%		0.43%			
100									
101		\$70,736,298.00				6.64%			
102									
103	Equity @ 13% based on risk from								
104	* Contractual commitment								
105	* Magnitude of surplus power								
106	* Competition								
107	* Basin at 12%								
108	* Phone Conversations with Auditors								
109									

## Appendix E - Integrated System Transmission Cost Support - Heartland

A	R	S	T	U	V	W	X
1		HCPD TRANSMISSION & GENERAL PLANT (WEST SIDE)		30-Jul-97			
2		December 31, 1996					
3		Page 6 of 7					
4							
5	CPX	Description	Investment	Accum Depr	Accum IDC	Net Book	Ann De
6		LINES					
6		049 345 kV Line from LRS -Stegall (50%)	\$170,416.26				
9		050 345 kV Line from LRS -Stegall Sub (50%)	\$14,968.31				
10		073 230kV Line From LRS to D Johnston	\$163,808.79				
11		074 345 kV Line From LRS -Story (.104569)	\$962,841.92				
12		075 345 kV line from CO Border to Story Sub	\$969,899.69				
13		077 LRS Plant Site Lines (.57214)	\$41,564.16				
14		102 230 Stegall Tie Line	\$20,461.61				
15		104 345 kV Line to co Border	\$552,803.72				
17		105 345 kV Line -CO Border to Ault	\$176,226.00				
18							
19	a	106 230 kV Sidney Tie Line	\$15,568.45				
20		Subtotal Lines	\$3,088,558.91				
21		SUBSTATIONS					
22		045 230 kV LRS Switch Station (4 Terminals)	\$133,600.37				
23		048 345 kV LRS Substation (5 of 8 Trmils) (.57214)	\$199,933.01				
24		076 230 kV D Johnston Substation	\$22,510.81				
25		085 345 kV Ault Substation	\$140,895.26				
26		086 230 Story Substation	\$23,825.80				
27		116 LRS #1 Main Transformer (.12234)	\$13,364.54				
28		117 LRS #2 Main Transformer	\$54,608.46				
29		118 LRS #3 Main Transformer	\$61,728.02				
30		190 345 kV Story Substation	\$165,708.21				
31							
32		Subtotal Substations	\$816,174.48				
33		MICROWAVE COMMUNICATIONS					
34							
35		131 Microwave-Wyoming (50%)	\$15,865.52				
36		132 Microwave-Colorado	\$15,180.97				
37							
38							
39		Less Microwave Non-Transmission (70%)	\$31,046.49				
40			\$21,732.54				
41							
42		Subtotal Microwave Communications	\$9,313.95				

## Appendix E - Integrated System Transmission Cost Support-Heartland

A	J	K	L	M	N	Q	P
43							
44		HCPD TRANSMISSION & GENERAL PLANT (EAST SIDE)					
45		December 31, 1996					
46		Page 5 of 7					
47							
48	CPX	Description	Investment	Accum	Ace <sup>TM</sup> , IDC	Net	Annual
49		MAINTENANCE BUILDINGS		Depr		Book	Depr
50		107 Maintenance Building-Stegall	\$51,950.19				
51		108 Maintenance Building-LRS (50%)	\$28,047.13				
52							
53		<i>Subtotal Maintenance Buildings</i>	<i>\$79,997.32</i>				
54							
55							
56		<i>Total LRS Transmission-East Side</i>	<i>\$1,742,812.33</i>	<i>\$124,629.02</i>	<i>\$163,817.29</i>	<i>\$1,454,366.02</i>	<i>\$18,426.24</i>
58		<i>Total LRS General Plant-East Side</i>	<i>\$94,907.27</i>	<i>\$6,786.85</i>	<i>\$8,920.90</i>	<i>\$79,199.52</i>	<i>\$1,003.43</i>
59							
60		<i>Total LRS-East Side</i>	<i>\$1,837,719.60</i>	<i>\$131,415.87</i>	<i>\$172,738.19</i>	<i>\$1,533,565.54</i>	<i>\$19,429.66</i>
61							
62		HEARTLAND TRANSMISSION					
63		TP-I Irv Simmons	\$871,635.18	\$62,330.89	\$81,930.17	\$727,374.12	\$9,215.54
64		TP-II	\$6,752,305.09	\$482,859.33	\$634,689.30	\$5,634,756.46	\$71,390.12
65		TP-II Marshall	\$402,635.67	\$28,785.46	\$37,836.74	\$335,913.67	\$4,255.89
66		TP-III Groton Sub	\$374,353.75	\$26,770.15	\$35,187.73	\$312,395.87	\$3,957.93
67							
68		<i>Total HCPD Transmission-East Side</i>	<i>\$8,400,829.89</i>	<i>\$600,745.83</i>	<i>\$789,643.95</i>	<i>\$7,010,440.12</i>	<i>\$88,819.48</i>
69							
70		HEARTLAND GENERAL PLANT					
71		General Plant Improvement	\$40,900.52	\$2,924.81	\$3,844.48		\$432.43
72		Furniture & Equipment	\$7,518.61	\$10,154.12	\$706.72		\$1,761.08
73		Furniture & Equipment-EPD	\$8,563.65		\$804.95		
74		Transportation Equipment	\$519.04	\$519.04	\$46.79		\$96.66
75		Headquarter's Improvement	\$1,200.50		\$112.84		
76							
77		<i>Total HCPD General Plant-East Side</i>	<i>150,702.32</i>	<i>\$13,597.96</i>	<i>\$5,517.78</i>	<i>\$39,586.57</i>	<i>\$2,290.38</i>
78		<b>TOTAL EAST SIDE TRANSMISSION</b>					
79		<b>&amp; GENERAL PLANT</b>	<b>\$10,297,251.81</b>	<b>\$745,759.66</b>	<b>\$967,899.92</b>	<b>\$8,583,592.23</b>	<b>\$110,539.52</b>
80							

## Appendix E - Integrated System Transmission Cost Support - Heartland

A	R	S	T	U	V	W	X
43							
44							
45		HCPD TRANSMISSION & GENERAL PLANT (WEST SIDE)					
46		December 31, 1996					
47		Page 7 of 7					
48	CPX	Description	Investment	Accum Depr	Accum IDC	Net Book	Annual Depr
49							
50		MAINTENANCE BUILDINGS					
51		108 Maintenance Building-LRS (60%)	\$28,047.12				
52							
53		<i>Subtotal Maintenance Buildings</i>	<i>\$28,047.12</i>				
54							
55		<i>Total LRS Transmission-West Side</i>	<i>\$3,904,733.39</i>	<i>\$807,414.50</i>	<i>\$1,063,135.31</i>	<i>\$2,034,183.58</i>	<i>\$119,375.17</i>
56		<i>Total LRS General Plant-West Side</i>	<i>\$37,361.07</i>	<i>\$7,725.46</i>	<i>\$10,172.24</i>	<i>\$19,463.37</i>	<i>\$1,142.20</i>
57							
58		<i>Total LRS-West Side</i>	<i>\$3,942,094.46</i>	<i>\$815,139.96</i>	<i>\$1,073,307.55</i>	<i>\$2,053,646.95</i>	<i>\$124,517.37</i>
59							
60		HEARTLAND TRANSMISSION					
61		TP-I Irv Simmons	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
62		TP-II	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
63		TP-II Marshall	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
64		TP-III Groton Sub	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
65							
66		<i>Total HCPD Transmission-West Side</i>	<i>\$0.00</i>	<i>\$0.00</i>	<i>\$0.00</i>	<i>\$0.00</i>	<i>\$0.00</i>
67							
68		HEARTLAND GENERAL PLANT					
69		General Plant Improvement	\$0.00	\$0.00	\$0.00		\$0.00
70		Furniture & Equipment	\$0.00	\$0.00	\$0.00		\$0.00
71		Furniture & Equipment-EPD	\$0.00		\$0.00		
72		Transportation Equipment	\$0.00	\$0.00	\$0.00		\$0.00
73		Headquarter's Improvement	\$0.00		\$0.00		
74							
75		<i>Total HCPD General Plant-West Side</i>	<i>\$0.00</i>	<i>\$0.00</i>	<i>\$0.00</i>	<i>\$0.00</i>	<i>\$0.00</i>
76							
77		<b>TOTAL WEST SIDE TRANSMISSION</b>					
78		<b>6 GENERAL PLANT</b>	<b>\$3,942,094.46</b>	<b>\$815,139.96</b>	<b>\$1,073,307.55</b>	<b>\$2,053,646.95</b>	<b>\$120,517.37</b>
79							

## Appendix E - Integrated System Transmission Cost Support - Heartland